


Municipality	LOCAL AGENCY	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds</b>	CONSULTANT	Name TranSystems
Township				Address 1051 Perimeter Drive. Suite 1025
County Lake				City Schaumburg
Section 09-00000-19-ES				State IL

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between the above Local Agency (LA) and Consultant (ENGINEER) and test. covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

### Section Description

Name Lake County 2040 Transportation Plan

Route \_\_\_\_\_ Length \_\_\_\_\_ Mi. \_\_\_\_\_ FT (Structure No. \_\_\_\_\_ )

Termini \_\_\_\_\_

#### Description:

The purpose of the project is to develop a 2040 long range-plan that identifies the deficiencies and recommends the improvements necessary to address the future transportation needs of Lake County addressing roadway, transit and non-motorized modes of travel.

### Agreement Provisions

#### The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
  - a. ☐ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
  - b. ☐ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
  - c. ☐ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
  - d. ☒ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
  - e. ☐ Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
  - f. ☐ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
  - g. ☐ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
  - h. ☐ Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer

- i. ☐ Assist the LA in the tabulation and interpretation of the contractors' proposals
- j. ☐ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
- k. ☒ Prepare the Project Development Report when required by the DEPARTMENT.

- (2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
- (3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
- (4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
- (5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
- (6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

**The LA Agrees,**

To pay for services as described in the attached scope of work on a cost plus fixed fee basis up to a not-to-exceed fee of \$467,815.40.

The LA may request the ENGINEER to perform tasks as described in the Assumptions section of the attached scope of work (Exhibit A), or other miscellaneous study work. Before performing this additional work, the LA and the ENGINEER shall agree in writing on the associated scope and fee.

- 1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:
  - a. ☐ A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
  - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

**Schedule for Percentages Based on Awarded Contract Cost**

Awarded Cost	Percentage Fees	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

- 2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus \* \_\_\_\_\_ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge. \* - See Exhibit B

"Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed in accordance with the following schedule:
  - a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.
  - b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.

By Mutual agreement, partial payments, not to exceed 90 percent of the amount earned, may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus \* \_\_\_\_\_ percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of THE LA AGREES. \* - See Exhibit B
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus \* \_\_\_\_\_ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications. \* - See Exhibit B

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#### **It is Mutually Agreed,**

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, any fee, commission, percentage, brokerage fee, gifts or any other consideration, contingent upon or resulting from the award or making of this contract. For Breach or violation of this warranty the LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST: Lake County of the  
(Municipality/Township/County)  
State of Illinois, acting by and through its  
County Board  
By \_\_\_\_\_  
Lake County Clerk  
(Seal) By \_\_\_\_\_  
Title Chairman of the County Board

Recommended for Execution:

By \_\_\_\_\_  
Martin G. Buehler, P.E.  
Title Director of Transportation  
County Engineer

Executed by the ENGINEER:

TranSystems  
1051 Perimeter Drive, Suite 1025  
Schaumburg, IL 60173-5058  
ATTEST: By \_\_\_\_\_  
Jeffrey R. Hall, P.E.  
Title Assistant Vice President  
By Todd S. Bright  
Todd S. Bright, P.E.  
Title Vice President

<p>Approved</p> <p>_____</p> <p>Date</p> <p>Department of Transportation</p> <p>_____</p> <p>Regional Engineer</p>
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**EXHIBIT A**

**SCOPE OF ENGINEERING SERVICES**

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan  
Section 09-00000-19-ES

The purpose of the project is to develop a 2040 long range-plan that identifies the deficiencies and recommends the improvements necessary to address the future transportation needs of Lake County addressing roadway, transit and non-motorized modes of travel. Federal transportation planning funds administered by the Chicago Metropolitan Agency for Planning through the Unified Work Program will be used for this project so federal procedures will be followed.

The Lake County Strategic Plan adopted September 8, 2009 consists of a Mission Statement, Vision, Statement of Values, and Goals. The Transportation Goal of the Strategic Plan is to "Reduce congestion and improve transportation systems in Lake County." The Strategic Statement to meet this Goal is to "Promote development of State, County, and municipal transportation systems that provide for efficient, flexible and uncongested movement through an integrated network of road, rail, public transit, and non-motorized (bicycle, pedestrian) modes of travel." The first Strategy is to "Identify and gain authority to implement additional or new sources of revenue to meet transportation capacity needs." The second Strategy is to "Build regional consensus on transportation solutions by collaborating with the State and local communities, and communicating with residents."

In order to provide Actions to the Strategies of the Strategic Plan, a long range Transportation Plan must be completed. The Transportation Plan will be used to identify funding needs for the first Action and build consensus on transportation needs for road, transit, and non-motorized travel modes for the second Action. The Transportation Plan will be used by the County to develop the Annual 5-Year Proposed Highway Improvement Program. The Transportation Plan will aid in moving the Strategic Plan to implementation.

Goal: Lake County Strategic Plan (Adopted September 8, 2009)

Strategy: 2040 Transportation Plan (Completed June 30, 2011)

Action: Annual Proposed Highway Improvement Program

The Transportation Plan scope will consist of Roadway, Transit, and Non-Motorized travel mode plans. In order to complete these plans the scope will also consist of Coordination, Travel Demand Modeling, and Deliverables.

### Task 1      Coordination

- A    Action: Build consensus on transportation solutions through collaboration and communication.
- B    Meet and coordinate with LCDOT
  - 1    Attend kickoff meeting (anticipated April 2010)
  - 2    Attend kickoff meeting with Lake County GIS (anticipated April 2010)
  - 3    Attend meetings with the County for project coordination (15 meetings)
  - 4    Attend final meeting to coordinate interactive web product (anticipated June 2011)
- C    Public Works and Transportation Committee Presentations

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

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- 1 Present transportation deficiencies (anticipated October 2010)
  - 2 Present transportation priorities (anticipated February 2011)
  - 3 Present Transportation Plan (anticipated May 2011)
- D Meet and coordinate with CMAP
- 1 Attend kickoff meeting (anticipated April 2010)
  - 2 Attend interim coordination meeting (anticipated August 2010)

### Task 2      Modeling

- A Action: Identify transportation capacity needs with the transportation network.
- B Data Collection
- 1 Traffic volume data
    - a 24-hour traffic count data from the past 3 years will be obtained from LCDOT, IDOT and the Tollway. Where possible, data should include volumes by direction and hour.
    - b Peak hour turning movement data will also be obtained from these agencies, where available.
    - c TranSystems will conduct 24-hour directional machine traffic counts at up to 30 locations to supplement existing data.
  - 2 Street network data – A GIS map will be generated of all major streets (collectors and higher), including ownership (IDOT, County, City, etc.), number of lanes and posted speed. Available data will be obtained from the County and IDOT and supplemented by TranSystems
  - 3 Intersection control – A map of all traffic signal controlled intersections in the county will be obtained from LCDOT. In addition, any information regarding all-way stop controlled intersections of the major street system will also be obtained. At non-signal and all-way stop controlled intersections it will be assumed that the lower volume roadway is stop controlled.
- C Develop base year Traffic Analysis Zones (TAZs) and socioeconomic data
- 1 CMAP ¼ mile land use zones will be split along natural boundaries such as road, rivers, etc. and then disaggregated back into larger zones following the natural boundaries and CMAPs larger traffic analysis zones.
  - 2 A manual review of each ¼ mile zone split will be necessary to ensure that the socioeconomic data is distributed appropriately based on existing land uses.
- D Develop base year street network – Using the data collected above, a county-wide street network will be created (including approximately 3 miles into adjacent counties). Centroid connectors will be added to distribute traffic from the TAZs onto the street network.

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

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- E Trip Generation
  - 1 CMAP uses a detailed process to calculate trip generation through their land use model that cannot be easily replicated, however, they do provide the productions and attractions calculated for each zone through this process. TranSystems will develop trip generation formulas for various trip types and attempt to calibrate those formulas to yield similar results as the CMAP data.
  - 2 AM and PM peak period trip trips will be estimated during the trip distribution process.
- F Capacity and Speed Tables – roadway capacity and speed tables will be generated based on various roadway types and posted speeds and then these characteristics will be applied to the links in the roadway network.
- G External trips – Trips originating and or destined for areas outside of the Lake County model area, but using roadways within the model area will be replicated using existing traffic counts and the CMAP model trip distribution and traffic assignment.
- H Transit Application – Transit travel will not be included within the travel demand model. However, it will be accounted for using several methods. For bus trips, CMAP transit trip tables will be evaluated and those trips deducted from our trip generation estimates, or a blanket reduction in vehicular trips applied. For rail trips, rail stations will be treated as traffic generators using boarding information for trip generation estimates.
- I Toll Application – A separate toll mode will not be included in the model. Toll diversion will be replicated by adding additional delay to toll routes. Note that this method should provide reasonable results for estimating volumes on existing toll facilities, but would not be appropriate for testing tolling impacts on proposed facilities.
- J Model calibration/validation – The base model will be calibrated using standard industry practices and validated against existing traffic count data looking at overall root mean square error data as well as across screen lines.
- K Develop 2040 socioeconomic data – CMAP has 2030 socioeconomic forecast data available, however, 2040 data will not be available at the TAZ level until late 2010. TranSystems will explore alternatives for developing 2040 forecasts, including using CMAP 2040 data at the city or county level, if available, and prorating at the TAZ level or developing methodologies for extrapolating 2030 data to 2040. The data will then be assigned at the TAZ level using a process similar to that described for the base year.
- L Generate 2040 traffic forecasts – The model will be run using 2040 socioeconomic data on the base street network to establish the initial list of deficient roadway segments. These segments will be

## **EXHIBIT A - PROJECT SCOPE**

### **Lake County 2040 Transportation Plan**

#### **Section 09-00000-19-ES**

identified based on volume to capacity ratio ranges. Historical growth trends in the region and CMAP traffic forecasts will be used to check Lake County future model forecasts for reasonableness.

- M Input baseline roadway improvements – Committed projects will be added to the 2040 model and the model re-run to develop a second level of deficiency analysis.
- N Test Improvement alternatives – Up to three packages of improvement alternatives will be tested in the model as developed during the study process. System-wide measures of effectiveness will be calculated for use in comparison of the scenarios.

#### **Task 3      Roadway Plan**

- A Action: Develop Roadway Plan consisting of a priority list of improvements to address transportation capacity needs.
- B Confirm accuracy of existing roadway network in CMAP model
  - 1 Location of existing roads
  - 2 Number of lanes
  - 3 Speed
- C Develop Baseline Roadway Improvements
  - 1 Incorporate projects from County 5-year program
    - a Current plan for 2009-2014
    - b Use new plan expected by June 2010 for 2010-2015
  - 2 Incorporate projects from IDOT's 5-year program
    - a Current plan for 2009-2014
    - b Use new plan expected by April 2010 for 2010-2015
- D Add Regionally significant projects to 2040 roadway network
  - 1 Illinois Route 53 Extension
    - a Mirror alternative included in CMAP's GOTO 2040 Plan
    - b Alternatives being considered are No-Build and 6-lane Expressway
    - c 6-lane Expressway alternative will be used if formal decision is not made by April 2010
    - d Other alternatives for Illinois Route 53 Extension are not included in the scope of work
  - 2 Illinois Route 120 / Central Lake Thruway
    - a If Illinois Route 53 Extension as an expressway is included in GOTO 2040, the Central Lake Thruway will be an expressway east of Illinois Route 53 and an arterial west of Illinois Route 53

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

Section 09-00000-19-ES

- b If Illinois Route 53 extension is not included in GOTO 2040, the Central Lake Thruway will be a 4-lane boulevard
  - 3 U.S. Route 41 intersection improvements
- E Analyze Deficiencies based on modeling of results of above improvements only
  - 1 Use v/c ratio as basis of comparison
    - a Within capacity ~  $v/c < 0.85$
    - b Near capacity ~  $0.85 < v/c < 1.05$
    - c Over capacity ~  $v/c > 1.05$
- F Add to the Roadway Network along State, County, and Local Routes until all deficiencies are met
  - 1 Consensus Priority Projects for Lake County along IDOT Routes
  - 2 Projects along Strategic Regional Arterial routes
  - 3 Projects along IDOT routes
  - 4 Projects along County routes
  - 5 Projects along local roadways of area significance
  - 6 Review results with LCDOT and determine routes not capable of expansion
    - a Remove routes from priority list
- G Prepare Priority List of Roadway Projects
  - 1 Develop criteria for development of priority listing
  - 2 Provide qualitative analysis for priority listing
  - 3 Organize projects into groups by jurisdiction
    - a Highest Merit Projects
    - b Middle Merit Projects
    - c Lowest Merit Projects
- H Develop Cost Estimate for projects
  - 1 Use detailed cost estimate available from previous studies for regional projects
  - 2 Use LCDOT 5-year program unit costs for all other projects
- I Develop 2040 Transportation Roadway Plan
- J Write Technical Memorandum summarizing results

### **Task 4      Transit Plan**

- A Action: The transit plan element will seek to identify the transit connections that are most important to Lake County so that the transit plan is a guide for what the County advocates for with the transit

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

Section 09-00000-19-ES

operators in the region. It will also seek to develop an action plan for LCDOT, which will involve identifying appropriate and acceptable roles for staff. This plan element will be done primarily by synthesizing existing information from studies that have been done or are on-going, and using professional judgment regarding service gaps and reasonable solutions. Some analysis of demographic data will be conducted, but this will be limited as the value of the 2000 Census data is questionable and the 2010 data will not yet be collected or available. Stakeholder input will be needed to conduct the prioritization efforts.

- B Identify Transit Gaps and Solutions
  - 1 Review and assess existing transit plans, studies (at a high level - not detailed evaluation of routes)
    - a Commuter Rail
    - b Bus Rapid Transit
    - c Suburban Bus
      - 1) Feeder
      - 2) Suburb-to-suburb
    - d Paratransit
  - 2 Identify current and projected transit gaps
  - 3 Develop general identification of solutions in a summary technical memorandum
    - a List by mode / 'owner'
      - 1) Paratransit
      - 2) CMAP transit projects (large, regional impact)
      - 3) Other transit
    - b Identify modal linkages from other studies
      - 1) Complete Streets
      - 2) Non-Motorized Study
      - 3) Existing Plans
- C Prepare Priority List of Transit Projects
  - 1 Establish a stakeholder group to review list
  - 2 Develop criteria for development of priority listing
  - 3 Provide qualitative analysis for priority listing
  - 4 Conduct stakeholder group sessions to organize projects into groups by mode / 'owner' (2 meetings)
    - a Highest Merit Projects
    - b Middle Merit Projects
    - c Lowest Merit Projects
- D County Level Role and Action Plan

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

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- 1 Discussions with LCDOT regarding potential roles for staff in moving transit plan elements forward (2 meetings)
- 2 Develop high level action plans (similar to action items in the Lake County Strategic Plan) for identified items
- 3 Prepare guidelines / policies / 'roadshow' materials or presentations for use in future by LCDOT

E Develop 2040 Transportation Transit Plan

F Write Technical Memorandum summarizing results

### **Task 5**

#### **Non-Motorized Plan**

- A Action: Develop Non-Motorized Plan consisting of a priority list of improvements to address needs.
- B Assist LCDOT in survey of Forest Preserve, municipalities, park districts, and other bike path building groups
  - 1 Determine location of existing and planned bike paths
  - 2 Develop updated base map of existing and planned bike path projects
- C Review recommendations from County Complete Streets project and incorporate into the Plan (available June 2010)
- D Evaluate connections with transit needs within the county
- E Identify locations for expansion and revisions of planned County trunk system
- F Identify areas of connection from County trunk system to non-motorized traffic generators
- G Prepare Priority List of Projects
  - 1 Develop criteria for development of priority listing
  - 2 Provide qualitative analysis for priority listing
  - 3 Organize projects into groups by jurisdiction
    - a Highest Merit Projects
    - b Middle Merit Projects
    - c Lowest Merit Projects
- H Develop Cost Estimate for projects
  - 1 Use LCDOT 5-year program unit costs for all other projects

## **EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

Section 09-00000-19-ES

- I Develop 2040 Transportation Non-Motorized Plan
- J Write Technical Memorandum summarizing results

### **Task 6**

#### **Deliverables**

- A Action: Provide long range-range transportation plan to guide development of short-range plans in order to meet Strategic Plan, Goals, Strategies, and Actions.
- B Group Travel Priorities by Location
  - 1 Roadway, Transit, and Non-motorized Priorities grouped by jurisdiction and merit
  - 2 Priorities will be grouped by location into packages
    - a Location will be based on transportation corridors within County
  - 3 Each travel mode priority will be prioritized within location package
- C GIS Data Collection
  - 1 Prepare base mapping utilizing GIS data
- D Create exhibits and presentation materials for committee presentations
  - 1 Transportation deficiencies presentation (anticipated October 2010)
  - 2 Transportation priorities presentation (anticipated February 2011)
  - 3 Transportation Plan presentation (anticipated May 2011)
- E 2040 Transportation Plan Map
  - 1 Full Color 24"x36" Summary of the 2040 Transportation Plan
  - 2 Overall summary to include write-up and maps for the following
    - a Roadway Priorities
    - b Transit Priorities
    - c Non-Motorized Priorities
  - 3 Transportation Plan Branding
    - a Based on Strategic Plan, GOTO 2040, Lake County Logo
  - 4 Provide CD-ROM of Map for LCDOT printing
- F GIS, Interactive Maps and CD-ROM Deliverables
  - 1 Provide GIS shape files for County use with County GIS system
  - 2 Provide interactive Web deployment map
    - a Based on LCDOT construction projects interactive map
  - 3 Provide Final Report on interactive CD-ROM only

**EXHIBIT A - PROJECT SCOPE**

Lake County 2040 Transportation Plan

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- G Final Report
  - 1 Executive Summary
  - 2 Technical Memoranda
    - a Modeling Methodology
    - b Roadway Plan
    - c Transit Plan
    - d Non-Motorized Plan

**EXHIBIT B**

**COST ESTIMATE OF CONSULTANT SERVICES**



**Cost Estimate of  
Consultant Services  
(CPFF)**

Firm	TransSystems
Route	2040 Transpo
Section	09-00000-19-I
County	Lake
Job No.	
PTB & Item	

Date 02/23/10

Overhead Rate 151.80%

Complexity Factor 0

**DBE 0.00%**



Route	2040 Transportation Plan
Section	09-00000-19-ES
County	Lake
Job No.	
PTB/Item	

**Consultant**  
**TranSystems**

Date: 02/23/10

Sheet 1 OF 2

Payroll Classification	Total Project Rates			1-Coordination			2-Modeling			3-Roadway Plan			4-Transit Plan			5-Non-Motorized Plan			
	Avg Hourly Rates	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg			
Project Manager (Highway)	58.38	410	10.75%	6.28	126	42.86%	25.02							8	2.17%	1.27	64	24.62%	14.37
Senior Project Engineer (Highway)	56.39	14	0.37%	0.21										6	1.63%	0.92			
Transportation Planner	53.95	230	6.03%	3.25	54	18.37%	9.91							168	45.65%	24.63			
Senior Transportation Planner	39.33	186	4.88%	1.92										186	50.54%	19.88			
Project Engineer (Highway)	50.50	816	21.39%	10.81	102	34.69%	17.52	382	24.24%	12.24	192	25.67%	12.96				68	26.15%	13.21
Design Engineer III (Highway)	45.45	52	1.36%	0.62							40	5.35%	2.43				12	4.62%	2.10
Design Engineer II (Highway)	36.30	694	18.20%	6.60				642	40.74%	14.79	40	5.35%	1.94				12	4.62%	1.68
Design Engineer I (Highway)	29.75	596	15.63%	4.65				320	20.30%	6.04	148	19.79%	5.89				56	21.54%	6.41
CADD Technician III	29.51	124	3.25%	0.96							68	9.09%	2.68				24	9.23%	2.72
CADD Technician II	26.68	200	5.24%	1.40				200	12.69%	3.39									
CADD Technician I	20.93	196	5.14%	1.08				32	2.03%	0.42	40	5.35%	1.12				12	4.62%	0.97
Senior Administrator	35.81	296	7.76%	2.78	12	4.08%	1.46				40	5.35%	1.91				12	4.62%	1.65
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**EXHIBIT C**

**SUBCONSULTANT SERVICES**

**Regina Webster & Associates, Inc.**

# Scope of Work Proposal

February 17, 2010

Mr. Jeffrey Hall, PE  
TranSystems  
1051 Perimeter Drive, Suite 1025  
Schaumburg, IL 60173

Subject: Proposal, Data Collection for Lake County 2040 Transportation Plan

Dear Mr. Hall:

Regina Webster & Associates (RWA) is pleased to submit this proposal for professional traffic engineering services for data collection for thirty locations in Lake County, Illinois.

## Proposed Scope of Work

RWA will collect 48-hour machine counts at thirty locations in Lake County, Illinois.

The machines will be installed on a Monday or Tuesday and will be recording 48 hours of data starting on Tuesday or Wednesday. Volumes and classification data will be provided by direction for each location. Three types of vehicles will be classified: 4-tire vehicles, Single Unit Vehicles, and Multi-Unit Vehicles.

Project deliverable is summary of the data in 15-minute intervals.

## Fee Proposal

RWA proposes to provide the services described above for a stipulated fee of \$13,467.22. The compensation includes labor and direct expenses.

Payment to RWA shall be made within 30 days after receipt of the invoice. This proposal shall be governed by and construed in accordance with the laws of the State of Illinois. Please indicate your acceptance of this proposal by signing the document in the space provided below, and then returning one copy for our files.



Regina Webster &  
Associates, Inc.  
6160 N. Cicero Avenue  
Suite 500  
Chicago, Illinois 60646  
773 283-2600 phone  
773 283-2602 fax  
[www.RWAengineers.com](http://www.RWAengineers.com)

We appreciate the opportunity to present our services for this project. Should you have any questions or require any additional information, please do not hesitate to contact us.



Respectfully submitted,

**Regina Webster & Associates, Inc.**

Julian Gnatenco, P.E.  
Chief Engineer

## PROPOSAL FOR DATA COLLECTION, LAKE COUNTY, ILLINOIS

PROPOSAL ACCEPTED

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NAME

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TITLE

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DATE

Regina Webster &  
Associates, Inc.  
6160 N. Cicero Avenue  
Suite 500  
Chicago, Illinois 60646  
773 283-2600 phone  
773 283-2602 fax  
[www.RWAengineers.com](http://www.RWAengineers.com)

## COST PLUS FIXED FEE

DF-824-039  
REV 12/04  
02/17/10

Regina Webster &amp; Associates

DATE \_\_\_\_\_

**FIRM**

PSB

PRIME/SUPPLEMENT

OVERHEAD RATE

### COMPLEXITY FACTOR

1.2604

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LEB

DBE 0.00%

**PREPARED BY THE AGREEMENTS UNIT**

**FIRM**  
**PSB**  
**PRIME/SUPPLEMENT**

DATE 02/17/10

**SHEET 1 OF 5**

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			48 hrs. Machine Counts			Data Processing & Reports				Project Management & QA							
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal	70.00	0																	
Project Manager	48.00	12	5.43%	2.61	4	2.56%	1.23	4	8.16%	3.92	4	25.00%	12.00						
Senior Engineer	42.75	4	1.81%	0.77							4	25.00%	10.69						
Engineer IV	36.00	8	3.62%	1.30							8	50.00%	18.00						
Staff Engineer	30.50	19	8.60%	2.62	4	2.56%	0.78	15	30.61%	9.34									
CAD Designer	40.00	0																	
Engineering Technician	21.75	30	13.57%	2.95				30	61.22%	13.32									
Field Technician 2	18.12	148	66.97%	12.13	148	94.87%	17.19												
Field Technician 1	13.47	0																	
Senior Administrative	31.75	0																	
Administrative	17.47	0																	
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